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YEWS (*Taxus*)

Unquestionably the best and most valuable group of low and medium growing Coniferae for mid western planting are the Yews, *Taxus* in variety, evergreens extraordinary notable for their dark foliage, unique fleshy red fruit, and ability to grow well in shade. Known and revered in Europe and the Orient for centuries, it is only within comparatively recent years, since World War I to be exact, that their beauty and usefulness has come to be recognized and appreciated in the United States.

Although only two species are indigenous to the North American Continent, the Canada and Western Yews, several additional species and over half a hundred hybrids, clons and varieties are currently being offered by the nursery trade. This multiplicity and often duplication of forms is a result of the genera's tendency toward variation, a circumstance which has proved confusing both to the gardener and to the taxonomist. For this reason our recommendations are confined to the most distinctive forms representative of the various shapes and sizes in which the plant occurs.

A most accommodating genus, *Taxus* will flourish in any reasonably good garden soil and in almost any exposure. A moist but well drained loam rich in humus is preferred, however, as is a shaded or partially shaded planting site. North or east exposures are preferable in the Chicago area, direct sunlight either in summer or winter often proving injurious to the foliage. Strong winds are also detrimental. For the most part pest free, mealy bugs, root weevils and scale are sometimes bothersome on *Taxus*. All may be controlled without difficulty.

With colorful red fruit one of the Yews' major attractions, a brief explanation of the genera's flowering and fruiting habits may avoid future disappointment to potential planters. Being with rare exceptions dioecious, the male and female flowers are produced on separate plants, both of which are necessary to insure fruit. One staminate plant will pollinate six or eight pistillate specimens. The tiny yellow green axillary flowers (the staminate rounded; the pistillate pointed) are quite devoid of ornamental

interest, a deficiency fully compensated for by the fall produced fruit. No other conifer bears such different appearing modified cones as the Yews' hard little nutlets enclosed in their attractive fleshy open topped cups. In addition to being extremely ornamental they are very palatable to birds.

Yew foliage, flat, blunt tipped, long-linear needles spirally arranged and spreading in two ranks provides unsurpassed year round greenery. The upper needle surfaces are darker than the lighter lower ones, but the all over effect is one of 'blackest' green.

Taxus baccata, The English Yew

The first *Taxus* to be introduced into our country was the English Yew, cuttings of which were brought over during Colonial times by the early settlers as cherished ties to their homelands. In milder parts of the country, mostly south of New York City, a number of these plants persisted, eventually reaching the tree stature characteristic of their European habitat. Under long cultivation many garden varieties of English Yew have since arisen, all but a few of which have proved unreliable in the north. Only one, in fact, is currently growing at the Morton Arboretum, *Taxus baccata repandens*, the Spreading English Yew. This, the hardiest and most useful variety for the north is low growing and wide spreading, an almost prostrate plant with drooping branchlets and needles of darkest green. No other Yew is as valuable for ground cover purposes, for planting on slopes or for facing taller materials. Unless it has a continuous snow covering in winter, however, or is fully shaded from sun it is apt to be tender and its foliage subject to severe winter burn. This being the case, caution should govern its use hereabouts.

Taxus brevifolia, the Western or Pacific Yew

This horizontally branched tree type whose range extends from British Columbia to California and Montana is unreliably hardy in this area. In the past the name has been erroneously used in referring to the Dwarf Japanese Yew, *Taxus cuspidata nana*.

Taxus canadensis, the Canada Yew or Ground Hemlock

Here is another native species of dubious reliability locally. In this case the limiting factor is inability to withstand heat and drouth rather than cold and low temperatures. Farther north it is a useful plant for cool shaded situations where its spreading growth provides a pleasing evergreen undercover up to 3 ft. or more in height. Its needles are lighter in coloring than those of the other Yews and its fruit display less profuse. A short needled, stiffly upright variety of the Canada Yew, discovered in 1929 at the Framingham Nurseries in Massachusetts and hailed as "a tough climate plant able to withstand the most severe New England winter", has failed to live up to its reputation here. It is known as the Dwarf Hedge Yew, *Taxus canadensis stricta*.

Taxus cuspidata, Japanese Yew

The Japanese Yew has been acclaimed Japan's greatest contribution to the gardens of the colder parts of America, and whether this high appraisal is based on the plant's extraordinary ornamental qualities or upon its general adaptability, no one will contest its rating as the species 'par excellence' of the *Taxus* clan.

The individuality expressed in its dignified habit of growth, in the deep tone of its dense foliage and in the unusual character of its open centered bright red berries imparts a flavor capable of lending distinction to any planting. And from a cultural standpoint it offers still more, the ability to adjust to all but the coldest and warmest sections of the middle west, a tolerance of soils and exposures and a comparative immunity to insect attacks and disease. Furthermore, it endures the dust and smoke of city atmospheres surprisingly well and withstands any amount of pruning or clipping. Obviously this accounts for its popularity as a hedging material.

Through the efforts of Robert Fortune, the plant hunter, the Japanese Yew was first introduced to England in 1855. Some six years later Dr. George R. Hall, an American doctor practicing in Shanghai brought plants of a more shrubby form back to his own garden in Rhode Island. Thus the Japanese Yew came to America!

Actually a tree type with one or more central leaders, which in its native Japan and Korea will reach heights up to 50 ft. and trunk diameters of 2 ft. or more, true *Taxus cuspidata* has in the past been incorrectly called "*cuspidata capitata*". And, to further confuse the situation the spreading, shrubby, V-shaped form with depressed top, propagated vegetatively from the side branches and usually sold as "*cuspidata*", is now classified as "*cuspidata expansa*". The number of *Taxus cuspidata* varieties is legion, but any selection of better ones would most certainly include the following:

Taxus cuspidata columnaris, Columnar Japanese Yew: Broader than the tender, very slender Irish Yew, this upright clon of moderate growth develops into a broad-topped, narrow based column 6 or 8 ft. tall. Its foliage is medium green. Also known as "*cuspidata fastigiata*" and "*cuspidata pyramidalis*".

Taxus cuspidata densa, Cushion Japanese Yew: This Japanese introduction credited to the old Parson's Nurseries on Long Island is a compact, dark needled, rounded or globose form considerably broader than high. Mature plants are said to attain an eventual height of 4 ft., but due to its exasperatingly slow growth, years would be required to see this size realized.

Taxus cuspidata intermedia, Intermediate Yew: In spite of considerable confusion in the nursery trade, the true "*intermedia*" is a somewhat upright, spreading branched form with dark needles intermediate in texture between "*cuspidata*" and the variety "*nana*". Its growth rate is also intermediate between the two.

Taxus cuspidata minima, Pygmy Japanese Yew: The pygmy of the clan is this diminutive slow growing variety discovered in Durand Eastman Park in Rochester, New York by B. H. Slavin, former Superintendent. A true dwarf, fifteen year old plants have been noted as not exceeding a height of 10 inches.

Taxus cuspidata nana, Dwarf Japanese Yew: Here is one of the best known and most usable landscape subjects of all, a wide spreading, flat topped shrubby form whose maximum height ranges from 3 to 5 ft. and whose spread from 10 to 15. It is more irregular in branching than the type and has shorter, broader, radially arranged needles of slightly duller coloring. Slow growing, though more rapid than "*densa*", it is a first class ornamental in every respect. Formerly and erroneously listed as "*cuspidata brevifolia*".

Taxus cuspidata Thayeri, Thayer Japanese Yew: Originating as a seedling at the Thayer Estate at South Lancaster, Massachusetts, this uniformly wide spreading Yew was selected and named by E. H. Wilson in 1930 on the basis of its flat topped, generally rectangular contour. Its breadth as a rule is double its height, which may reach 8 ft.

Taxus Hunnewelliana (*cuspidata* x *canadensis*), Hunnewell Yew

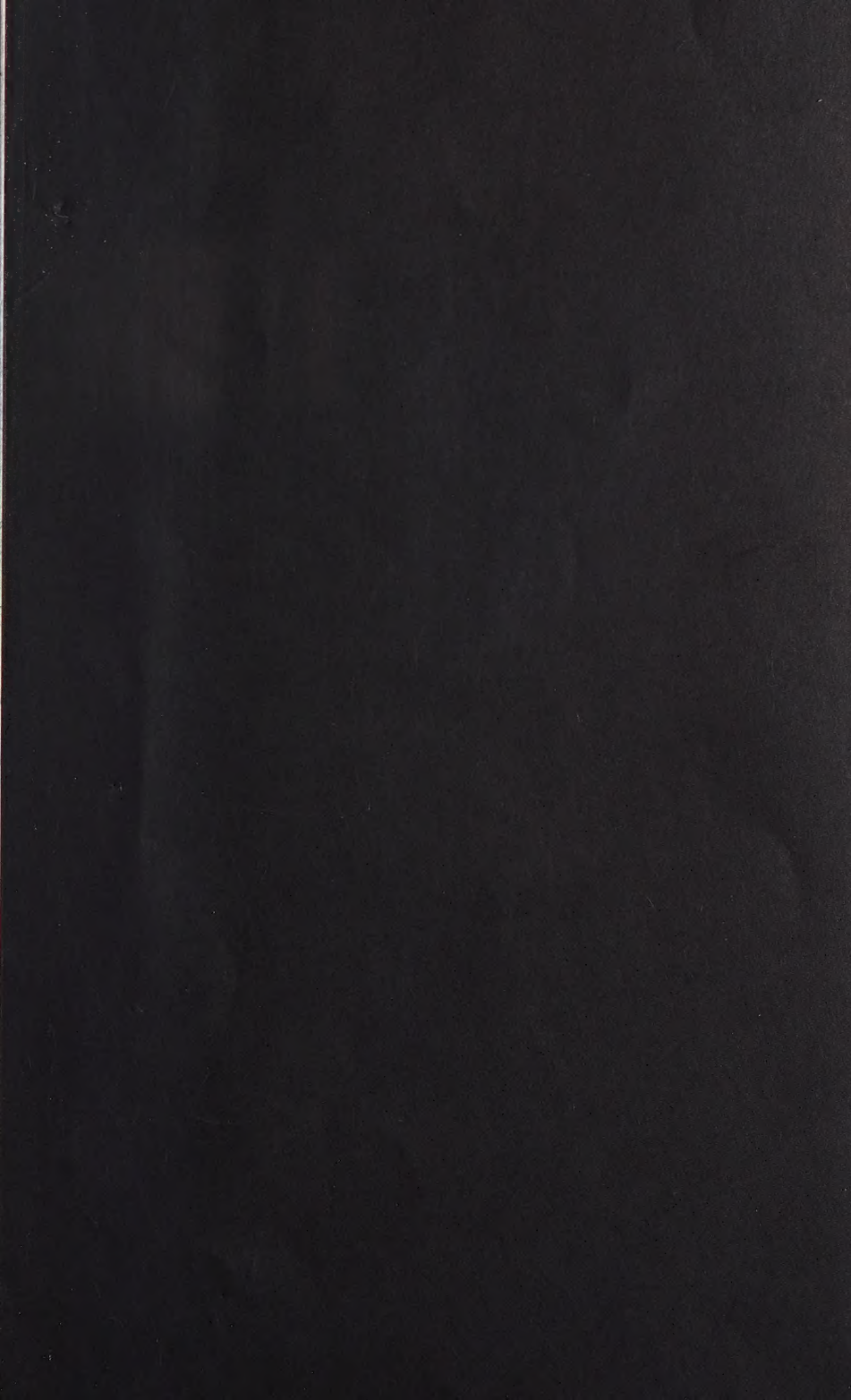
This natural cross, intermediate in contour and general appearance between the parents exhibits certain characteristics of both. It is of more slender habit than "*cuspidata*" and has narrower, distinctly forward pointing needles. Having unfortunately inherited from the Canada Yew the objectionable feature of poor winter color and susceptibility to burn we hesitate to recommend it for local use.

Taxus Media (*cuspidata* x *baccata*), Anglojap Yew

Another more notable hybrid, in this case one combining the hardiness and vigor of the Japanese Yew with the ornamental qualities of the English type, is the Anglojap Yew, among whose progeny will be found some of our most highly regarded landscape plants. Mr. T. D. Hatfield, one time Superintendent of the celebrated Hunnewell Estate in Wellesley, Massachusetts, is responsible for its origination in 1900, and the late Alfred Rehder of the Arnold Arboretum for its appropriate name. In its typical form, broad pyramidal and spreading branched often with a central leader, it not infrequently assumes an arborescent character of considerable size.

Many interesting horticultural variations of *T. media* are now available, all of which must be propagated vegetatively if their individual character is to be retained.

Taxus media Andersoni, Anderson Anglojap Yew: A singular informality characterizes the Anderson Yew, fast growing, loosely branched, wide vase-shaped variety with slender twigs and glossy lighter green



needles. To many its openness detracts from its landscape value. Height 6 to 8 ft.

Taxus media Browni, Browns Anglojap Yew: The uniformity and compactness of the broad conically shaped Browns Yew has resulted in its being rated as one of the best of its class in the 4 to 6 ft. plus height range. Comparatively slow growing, bushy, and with short, very dark, fine textured needles, it may be easily trained into a globular specimen or grown as a hedge maintained at as low a height as one foot. One shortcoming is its failure to set fruit.

Taxus media Hatfieldi, Hatfield Anglojap Yew: This well known selection whose name honors its introducer, T. D. Hatfield, is one of the most popular Yews in cultivation. Notwithstanding a certain similarity to the Spreading Japanese Yew, "*Hatfieldi*" has a more upright branch structure and displays a blunt pyramidal habit of greater density and compactness. Radially spreading foliage is another characteristic. Being quite bushy, it fills out well both at the top and at the base, giving a neat formal appearance without the necessity of clipping. It belongs in the 6 to 10 ft. height group and is classed as a good grower.

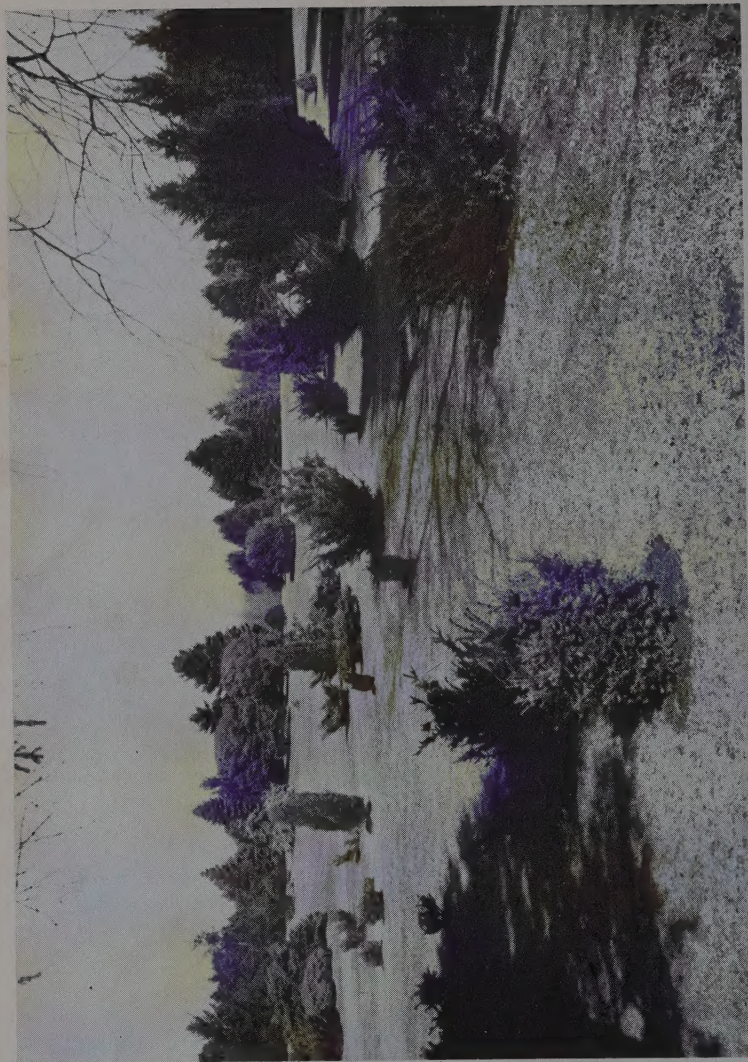
Taxus media Hicksii, Hicks Anglojap Yew: Equally popular is this fine variety discovered among a group of seedlings at the Hicks Nursery on Long Island. Unique in the distinctly upright or columnar habit of growth characteristic of younger specimens, it is an ideal accent plant of quite formal appearance. With age it broadens appreciably, however, developing numerous side branches and assuming a more open oblong shape. Its close set needles are of deepest green and it fruits abundantly. Although often recommended for hedge purposes, we find its basal openness objectionable. Height 6 to 10 ft.

Taxus media Kelseyi, Kelsey Anglojap Yew: Selected not only because of its heavy fruiting tendencies but also because it starts bearing at an early age, the Berrybush Yew, as it is often called, rates with the best of the 4 to 6 ft. bushy upright growers.

Taxus media Wardi, Ward Anglojap Yew: A definite improvement over the other forms in the flat topped 1 to 4 ft. height category, the low growing Ward Yew is recommended because of its superior stubby dark foliage and faster growth. Even though it fills out well in a comparatively short time and may eventually develop a spread six feet across, it can be counted on to retain its dwarf compactness indefinitely.

There are, as previously stated, many other *Taxus* selections in cultivation, some very promising and others too similar to existing forms to warrant special recognition. It will be some time, however, before they can be fully tested and properly evaluated as regards their landscape value locally.

E. L. Kammerer



A view in the *Taxus* section of the Morton Arboretum Conifer Collection. *Taxus cuspidata* "Kallay's Vase-Shaped" Yew at left and *Taxus media Wardi*, the Ward Anglojap Yew at right.

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